

ENGINEER'S OFFICE
10 LOWELL STREET, BOSTON, MASS.

HOUSATONIC RIVER FLOOD CONTROL

NORTHFIELD BROOK DAM & RESERVOIR

NORTHFIELD BROOK

(LOWER NAUGATUCK RIVER, BELOW THOMASTON)

CONNECTICUT

DESIGN MEMORANDUM NO. 6

REAL ESTATE



U.S. Army Engineer Division, New England
Corps of Engineers Waltham, Mass.

AUGUST 1962

NORTHFIELD BROOK DAM AND RESERVOIR

HOUSATONIC RIVER FLOOD CONTROL

NORTHFIELD BROOK, CONNECTICUT

DESIGN MEMORANDUM NO. 6

REAL ESTATE

21 August 1962

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS

424 TRAPELO ROAD
WALTHAM 54. MASS.

ADDRESS REPLY TO:
DIVISION ENGINEER

REFER TO FILE NO.

NEDRR

21 August 1962

SUBJECT: Design Memorandum No. 6, Real Estate, Northfield Brook Dam
and Reservoir, Thomaston, Connecticut

TO: Chief of Engineers
ATTN: ENGRE-AP
Department of the Army
Washington 25, D. C.

1. Submitted herewith for review and approval are two copies of Design Memorandum No. 6, Real Estate, covering lands and interests therein required in conjunction with Northfield Brook Dam and Reservoir. The area considered is located in the towns of Thomaston and Litchfield, Litchfield County, Connecticut.

2. An estimated total of 250 acres will be acquired in fee in accordance with current regulations and the requisites of sound real estate practice. It is not currently planned to acquire flowage easements. Lands acquisition is presently programed for the second quarter of FY 1964.

3. In accordance with EM 405-2-150, paragraph 11, it is considered expedient to submit the subject Design Memorandum in advance of the preliminary master plan in order to permit early correlation of the acquisition program with the Connecticut State Highway Department and possible acceleration of construction start to FY 1963. As presently proposed, the Reservoir Management Plan does not recommend additional land for collateral purposes.

4. It is recommended that the subject Design Memorandum for Real Estate be approved and this office authorized to proceed with the acquisition program outlined therein subject to the availability of funds and under existing regulations.

Incl
Design Memo No. 6
(in dupe)

SEYMOUR A. POTTER, JR.
Brigadier General, USA
Division Engineer

FLOOD CONTROL PROJECT
NORTHFIELD BROOK DAM AND RESERVOIR
NORTHFIELD BROOK
HOUSATONIC RIVER BASIN
CONNECTICUT

DESIGN MEMORANDA INDEX

<u>Design Memo No.</u>	<u>Title</u>	<u>Submitted</u>	<u>Approved</u>
1	Hydrology & Hydraulics Analysis	31 May 1962	29 Jun 1962
2	Site Geology	12 Apr 1962	8 May 1962
3	General Design	29 Jun 1962	10 Aug 1962
4	Relocations	30 Apr 1962	29 Jun 1962
5	Concrete Materials	21 Nov 1961	7 Dec 1961
6	Real Estate	21 Aug 1962	
7	Embankments & Foundation	13 Jul 1962	
8	Detailed Design of Structures	15 Aug 1962	
9	Reservoir Management		

DESIGN MEMORANDUM NO. 6

REAL ESTATE

NORTHFIELD BROOK DAM AND RESERVOIR

THOMASTON, CONNECTICUT

21 August 1962

This Real Estate Design Memorandum has been prepared in accordance with EM-405-2-150 dated 1 October 1958 as revised.

PREPARED BY:

Paul E. Hanglin
PAUL E. HANGLIN
Appraiser

REVIEW AND APPROVAL CERTIFICATION

The undersigned herewith certifies that he has reviewed this Real Estate Design Memorandum; that he has inspected the lands proposed for acquisition and comparable property in the vicinity; that data set forth herein are complete and accurate to the best of his knowledge.

W. B. Battis
W. B. BATTIS
Assistant Chief,
Real Estate Division

APPROVED FOR THE DIVISION ENGINEER:

J. M. Geoghegan
J. M. GEOGHEGAN
Chief, Real Estate Division

DESIGN MEMORANDUM NO. 6

REAL ESTATE

NORTHFIELD BROOK DAM AND RESERVOIR

THOMASTON, CONNECTICUT

TABLE OF CONTENTS

<u>PARAGRAPH</u>	<u>SUBJECT</u>	<u>PAGE</u>
1.	Project Designation and Purpose	1
2.	Location of the Project	1
3.	General Area Description	1
4.	Trends and Transition	2
5.	Description of the Project Area	2
6.	Zoning	3
7.	Uses	3
8.	Utilities	4
9.	Crops and Timber	4
10.	Relocations	4
11.	Borrow Requirements	5
12.	Project Operational Data	5
13.	Reservoir Management	5
14.	Estates to be Acquired	6
15.	Land Requirements	6
16.	Estimated Tax Losses	7
17.	Severance Damage	7

<u>PARAGRAPH</u>	<u>SUBJECT</u>	<u>PAGE</u>
18.	Evaluation Basis and Comparable Sales	8
19.	Correlation and Unit Values Assigned	17
20.	Gross Appraisal	18
21.	Contingencies	19
22.	Acquisition Costs	19
23.	Resettlement Costs	20
24.	Cost Summary	20
25.	Land Acquisition Schedule	20
26.	Personnel and Facilities	20
27.	Conclusion and Recommendations	21

EXHIBITS

<u>PLATE NO.</u>	
6-1	Location Map
6-2	Reservoir Map
6-3	Northfield Brook Dam
6-4	Comparable Sales Map
6-5	Photographs

1. PROJECT DESIGNATION AND PURPOSE

This project has been designated the Northfield Brook Dam and Reservoir. It is one of five flood control dam and reservoir projects proposed for construction on tributaries of the Naugatuck River to minimize flood contribution in the Naugatuck River and supplement protection provided by the Thomaston Reservoir and local improvement projects.

Construction of the Northfield Brook Dam has been authorized under Title II of the Flood Control Act of 1960, Public Law 86-645.

2. LOCATION OF THE PROJECT

The Northfield Brook Dam will be located on Northfield Brook in the Town of Thomaston, Connecticut, approximately 1.3 miles above its confluence with the Naugatuck River. The reservoir will be about 1.5 miles long and lie within the Towns of Thomaston and Litchfield, Connecticut.

Thomaston is located in the upper Naugatuck Valley, 37 miles northeast of Bridgeport, 30 miles northwest of New Haven and 24 miles southwest of Hartford, Connecticut. The City of Waterbury (population: 100,000) lies immediately to the south and is the regional center for the area. Reference is made to Plate 6-1 (Location Map).

3. GENERAL AREA DESCRIPTION

The project area is located in the west central part of the State of Connecticut in the northwesterly section of the Town of Thomaston. The upper reaches of the reservoir area will extend a few hundred feet into the Town of Litchfield.

The Town of Thomaston is located in the County of Litchfield, about 10 miles north of Waterbury, the brass center of the world; and 9 miles south of Torrington, Connecticut, an industrial town. Thomaston was incorporated in May 1875 and has a current population of approximately 6500 persons. Its residents, for the most part, have an English, Irish, Scottish, Italian and Polish lineage.

Thomaston has 14 principal industrial plants employing about 2300 persons. The chief manufactured products consist of brass and copper goods, clocks and watches, electronic equipment, machinery, machine tools and screw machine products.

Transportation facilities are largely dependent upon the private automobile. Bus service is provided by the New England Transportation Co. Railroad freight service only is available daily on the New York, New Haven & Hartford Railroad.

Highways serving the area consist of Connecticut Route #8, which passes through the Town in a north-south direction; and U.S. Routes #6 and #202, which go through the Town in a east-southwesterly direction.

The Town of Litchfield (population: about 5000) has agriculture as its principal industry and is also a well-known summer resort. The section of the town in which the proposed reservoir will lie is called the Borough of Northfield, which has its own post office. The area is classified as rural, and is served by State Road #854.

4. TRENDS AND TRANSITION

During the past 10 years, agriculture in the Town of Thomaston has declined; and the Town is becoming an industrial and residential community. Several small residential developments have been started; and much of the open field land and road frontages in the outlying districts have been sold for homesites. The demand for real estate has been steady. Because of the limited areas left and available for future development, real estate values have risen following a general trend of many of the nearby communities. This gradual upward trend is expected to continue for the foreseeable future.

5. DESCRIPTION OF THE PROJECT AREA

The project area is located about one mile northwesterly of the business center of Thomaston, Connecticut. Litchfield Road leads to the project area from Thomaston, and about one mile of this highway lies within the reservoir area. The Reservoir is also crossed by two separate electric transmission power lines. There are two improved properties to be acquired, consisting of a former poultry farm and the Thomaston Rod and Gun Club.

The terrain consists of a narrow valley flanked by fairly steep rising hills on either side. The major portion of the land is wooded with some partially cleared areas consisting of former pasture and some hayfields. The Northfield Brook winds back and forth and roughly follows the same general course as Litchfield Road.

At the upper reaches of the reservoir near the Thomaston-Litchfield town line, Knife Shop Road, a secondary road leading to properties in Litchfield, will lie within the project area and will be relocated to connect with State Road #854. Properties located above the guide taking line on this road will have access northward and connect to Litchfield Road just above the project area.

a. Mineral Deposits

Field inspections throughout the proposed reservoir site have disclosed no evidence of mining or valuable mineral deposits.

There is a small borrow pit located on one ownership in the vicinity of the dam site.

b. Water and Other Outstanding Rights

No evidence of water rights were disclosed during preliminary investigations. Two small private dams are located within the project area but no special water rights are included as these dams are considered to be part of the improved homesite.

c. Access Roads

It is not presently anticipated that special access roads will be required during construction. Litchfield Road will be used for construction access after the relocated road is available to traffic.

6. ZONING

The Town of Thomaston has no zoning law. Subdivision controls are regulated by a Planning Commission, which makes decisions on all proposals for land subdivision. Current subdivision regulations in Thomaston require that lots which are not served by a public water supply or by a public sewer system shall not be less than 20,000 square feet in area unless the Commission approves a smaller lot area.

The Town of Litchfield does not have zoning regulations.

7. USES

a. Present Use

The present uses of the land within the project area are for recreational, agricultural and residential purposes. Much of the road frontage is considered suitable for development of homesites. The one ownership which is improved as a poultry unit is no longer operated for that purpose. The poultry business is in a declining economic status in this area, and the present downward trend is expected to continue. These conditions indicate a change in use to residential purposes with the possibility that some of the outbuildings may be converted to other uses relative to rural residences. The Rod and Gun Club is used for recreational purposes.

b. Highest and Best Use

The Town of Thomaston is relatively limited in area, containing only 8,606 acres as compared to the neighboring Town of Litchfield, which comprises an area of 33,065 acres. Approximately 850 acres of Thomaston is reserved for State Park and Forest. In addition, the

Thomaston Dam and Reservoir has taken about 914 acres from the Town. The proposed relocation of Connecticut Route #8 will also require considerable land takings, thereby reducing the remaining developable areas and at the same time increasing the demand for vacant land. Much of the undeveloped area of the Town is rough terrain, and soil conditions are not ideally adaptable for residential purposes.

These facts and the limited supply of good developable land indicate that the highest and best use for the major portion of the lands within the reservoir area is for future residential development.

8. UTILITIES

Services from public utilities are limited to electricity and telephone in this section of Thomaston. Water is obtained by individual owners from underground sources, and sewage disposal is provided by individual septic tanks.

9. CROPS AND TIMBER

Some hay was harvested from the fields within the project area during the last year. Since most of the field land is classified as developable for residential purposes, any crops which may be growing at the time of taking would be included in the land value. It is expected that adequate time will be available to harvest growing crops and no allowance is contained herein for this item.

The woodland cover in the project area consists mostly of second growth mixed woods with a few small stands of hemlock. The value of any wood growth will be reflected in land value.

10. RELOCATIONS

Litchfield Road, State Road #854, will be relocated for a distance of approximately 9,000 feet and connected by a bridge to Knife Shop Road.

Two power lines cross the reservoir area about 0.75 mile upstream from the proposed dam site. Portions of these lines will require location.

Telephone and electric lines along the existing Litchfield Road will either be abandoned or partially relocated. The owners of these lines are the Southern New England Telephone and Telegraph Co., and the Connecticut Power Co.

There are no cemeteries or railroads within the project area. Details of proposed relocations are covered in Design Memorandum for

Relocations #4, dated 30 April 1962. New rights-of-way, except for State Road #854, will be acquired by relocation agreements; and real estate requirements therefor are not included herein.

No structures or facilities in the project area come within the purview of Section III of the Act of Congress approved 3 July 1958 (Public Law 85-500).

11. BORROW REQUIREMENTS

Pervious and impervious borrow areas to be required in conjunction with construction are partly within the project area and have been included in fee. Approximately 30 acres will be required outside the project area.

12. PROJECT OPERATIONAL DATA

Design characteristics of the Northfield Brook Dam will not provide for control of reservoir filling since the dam's outlet will be ungated and the reservoir will fill itself whenever stream flow exceeds discharge capacity.

a. Reservoir Data

<u>Features</u>	<u>Elevation</u>
Outlet Invert - Intake Sill	476.0'
Permanent Pool	500.0'
Spillway Crest	576.0'
Maximum Surcharge	586.1'
Top of Dam	591.0'

b. Frequency Data

Frequency data is omitted since it does not affect valuation estimates of the proposed fee acquisition.

13. RESERVOIR MANAGEMENT

A conservation pool with a top elevation of 500' m.s.l. and an area of about 8 acres will be maintained. An area adjoining this pool and entirely within the proposed fee area is planned for development as a recreation area. Access will be provided by the existing State Road #854, which will also provide access for maintenance purposes. There is currently no specific plan for the development or management of the recreation area.

Northfield Brook is considered to be an important fishing stream in this area. It is anticipated that the Connecticut Board of Fisheries

and Game will request and be granted suitable licenses to pursue programs for sportsmen within the fee area of the project subject to such limitations as may be required by the operation of the recreation area. It is not anticipated that additional lands or interests therein will be required for access or collateral uses of the reservoir area.

Reservoir management plans will be presented in more detail in a Preliminary Design Memorandum, Reservoir Management, to be submitted at a later date. In the event that additional lands or rights therein are desired in conjunction with the programs of the U.S. Fish and Wildlife Service or other agency, these requirements will be the subject of a supplemental report at a later date.

14. ESTATES TO BE ACQUIRED

The acquisition of land for Northfield Brook Dam and Reservoir will be in conformity with the criteria set forth in EM-405-2-150 dated 1 October 1958 as amended. It is anticipated that all acquisitions will be in fee since no instances are known which appear to qualify as exceptions to basic policy. Standard forms of option will be used for this purpose, and descriptions of estates to be acquired will conform to those recommended in Appendix III of EM-405-1-640.

15. LAND REQUIREMENTS

The minimum guide taking line for real estate at Northfield Brook Dam and Reservoir has been established at 581' m.s.l., and provides 5' above spillway crest for surcharge and saturation effects. Area capacity curves indicate an area at this elevation of 75 acres. The proposed real estate acquisition line will extend well beyond this minimum.

The proposed relocation of State Road #854 is on the side of the westerly enclosing ridge. To realize construction economies, the required right-of-way will be held as close as practicable to the guide taking line. In actual practice, the precise location of the center line will depend on ground surveys and will probably vary so that the edge of the right-of-way will drop below G.T.L. in some areas and rise slightly above it in others. Most of the ownerships involved have access from Walnut Hill Road and Northfield Road on the top of the ridge and extend to the westerly bank of Northfield Brook so that only the rear land will be required for reservoir purposes. It is anticipated that in all such cases any remainder between the G.T.L. and the right-of-way for the relocation of State Road #854 will be below economically utilizable size and severance damages will approximate the value of such remainders below the new road. It is therefore proposed to acquire in fee all of the land of such ownerships which is below the

upper limit of the new right-of-way. This plan will assure full public access to the reservoir area from the new road and avoid possible future encroachment. It is further proposed that only one appraisal and acquisition process for each such tract be initiated. On this basis, mapping, survey and legal descriptions will be required at an early date to permit maximum co-operation with Connecticut Highway Department for the relocation of State Road #854.

On the easterly side of the retention basin, it appears that the only access to ownerships is State Road #854; and with the relocation of this road, remainders above G.T.L. will be landlocked. It is therefore considered sound real estate practice to purchase these properties in entirety, and area estimates are predicated on this proposal. The proposed real estate acquisition line is shown on Plate 6-2.

The proposed construction area is outlined on Plate 6-3. The total area for road relocation, construction area, borrow and retention basin is estimated at 250 acres. A series of eight photographs considered representative of the area are appended as Plate 6-5.

16. ESTIMATED TAX LOSSES

Lack of detailed ownership data at this time precludes the recitation of a detailed tract register, but owners of record of most known properties have been identified and tax assessments have been obtained. By extrapolating for total estimated acreage to be acquired, the following total-assessed values and tax losses are estimated:

	<u>Assessed Value</u>	<u>Rate Per M</u>	<u>Tax Loss</u>
Thomaston	\$80,000	\$36.50	\$2920
Litchfield	2,000	38.00	<u>76</u>
		Total	\$2996
		Rounded to:	\$3,000

17. SEVERANCE DAMAGE

Under the proposed plan of purchasing in fee to the exterior bounds of properties where inadequate access will be available to remainder, severance damage should be relatively minor. However, partial takings cannot entirely be avoided, and some damage of this nature is likely to occur. An allowance of \$4,000 is included for damages which may result due to loss in values attributable to this item. Any severance damages that will be allowed within the proposed acquisition program will be estimated on the basis of "before and after" appraisal

methods and will reflect actual value losses incurred by remainders as a result of partial acquisition.

18. EVALUATION BASIS AND COMPARABLE SALES

Each improved property within the project has been inspected from both the exterior and from the interior as well as the assessor's detailed records, which provided up-to-date information on size and interior improvements.

Knowledge of the real estate market in Thomaston and Litchfield was gained from local real estate brokers, town officials, and property owners. Computations of cost less accrued depreciation were made to estimate the value of improvements for which market data were not available.

The following is a list of sales which were used as a guide in estimating the values of properties required. The relative location of these sales is shown on Plate 6-4 (Comparable Sales Map).

TABULATION OF SUPPORTING SALES DATA

<u>Sale No.</u>	<u>Grantor</u>	<u>Grantee</u>	<u>Date</u>	<u>Acres</u>	<u>Sale Price</u>	<u>Value Imp.</u>	<u>Average Per Acre</u>
1	Senew	Sumpter	1957	0.34	\$1,000	---	\$3,000
2	Jacobson	Scherba	1959	51.00	9,500	\$1,500	157
3	Jacobson	Gangloff	1959	3.80	1,500	---	395
4	Jacobson	Smith	1959	1.17	500	---	427
5	Guyion	Campman	1959	1.78	2,300	---	1,292
6	Walcott	Wagner	1961	1.38	2,000	---	1,449
7	Wagner	Flammia	1961	1.38	2,500	500	1,449
8	Driscoll	Mathews	1959	0.46	1,200	---	2,609
9	Famiglietti	Carrington	1959	0.46	1,000	---	2,174
10	Goodwin	Stevens	1957	4.50	2,800	---	622
11	Goodwin	Beacon Grange #118, Inc.	1960	1.00	1,200	---	1,200
12	Miller	Kloss	1959	5.70	1,500	---	263
13	Lawson	Thorn	1960	95.00	35,000	12,000	242
14	Gill	DeBisschopp, et al	1957	21.00	10,000	---	476
15	Haney	Burke	1960	40.00	12,500	500	300
16	Chapman	Innes Realty, Inc.	1957	28.00	30,000	---	1,071
17	DeBisschopp, et al	Schatzki	1960	6.5	3,500	---	538
18	Cummings	Martone	1961	1.0±	4,000	---	4,000
19	Hellerich	Hartford Elec. Light Co.	1960	6.66	1,500	---	225

Sale #1 - Senew to Sumpter
1957 Lot \$1,000

This sale consists of an unimproved lot containing a total area of 15,000 sq. ft. It is located on the easterly side of Litchfield Road, Thomaston, Connecticut, near the proposed dam site of the Northfield Brook Reservoir and within the proposed reservoir area. The lot has 100 feet of frontage on Litchfield Road and is about 150 feet deep. The land rises towards the rear of the lot and has a cover of scattered trees and brush. Utilities serving the lot are electricity and telephone systems on Litchfield Road but no public water or sewer lines exist at this location. The indicated value of the land at the time of sale was approximately \$1,000 or \$10 per front foot on Litchfield Road.

Sale #2 - Jacobson to Scherba
10 July 1959 51 Acres \$9,500

This sale consists of a former small farm containing 51 acres of land, a barn and several small outbuildings. The dwelling on this property was destroyed by fire prior to the sale. This property is located on the westerly side of Litchfield Road, immediately to the south of the proposed dam site. A portion of the land of this property will be acquired for the project. Utilities serving the property are electricity and telephone systems. Water is obtained from a well and sewage disposal is by septic tank.

The Northfield Brook passes to the rear of the buildings, and a small partly breeched dam is located just upstream from the buildings. The land is rolling and rises steeply in a westerly direction from Northfield Brook towards Walnut Hill Road.

The sale consisted of approximately 10 acres of open tillable land, 12.5 acres of open pasture land and the balance of wooded land. The property, which was purchased as a homesite, has been improved with a new 6-room ranch-type house.

The following is a breakdown of the estimated land and building values based on the sales price.

1.0	Acres	Homesite	@ \$1,000	=	\$1,000
2.0	"	Frontage - Litchfield Rd.	@ 500	=	1,000
4.7	"	Frontage - Walnut Hill Rd.	@ 500	=	2,350
9.9	"	Tillage	@ 200	=	1,980
14.0	"	Woodland	@ 50	=	700
19.4	"	Pasture & Woods	@ 50	=	970
<u>51.0+</u> Acres					<u>\$8,000</u>
Barn & Outbuildings					<u>1,500</u>
Total:					\$9,500
Sale Price:					\$9,500

Sale #3 - Jacobson to Gangloff
1959 3.8 Acres \$1,500

This sale of interior pasture and wooded land is located between Litchfield Road and Walnut Hill Road in Thomaston, Connecticut, about 1,000' westerly of the proposed dam site area. The land, which is slightly rolling, is on the top of a ridge. The rear property line abuts the land discussed in Sale #1. The present owners stated that they purchased the land for enlarging not only their present pasturing acreage but also for their holdings for possible future development. The wood growth has been cut off since the date of sale.

Based on the sale's price, the average indicated value of this land is \$400 per acre.

3.80 Acres Pasture and Woodland @ \$400 = \$1,520

Sale Price: \$1,500

Sale #4 - Jacobson to H. Smith
1959 1.17+ Acres \$500

This sale of interior wooded land is located to the rear of a private residence on Walnut Hill Road. The parcel, which is about 204' x 251', was purchased for enlarging the homestead. This land abuts the previous sale and is an outsale of the original Jacobson farm discussed in the above Sale #2.

1.17+ Acres @ \$425 = \$497

Sale Price: \$500

Sale #5 - Guyion to Campman
7 October 1959 80,000 sq. ft. Lot \$2,300

This lot sale is located on the westerly side of Walnut Hill Road about 3 miles westerly of the proposed dam site and about one-quarter mile northerly of Route #109. The lot consists of open field land slightly above road grade, having 200' frontage and an average depth of 400'. Public utilities available at this location are electricity and telephone systems.

The indicated average value of this land, based on the sales price, is about \$1,300 per acre or approximately \$11.50 per front foot.

Sale #6 - Walcott to Wagner
1961 Lot \$2,000

This lot sale is located on Twin Oak Drive, off Hickory Hill Road in Thomaston, about 1.25 miles westerly of the proposed dam site area. The land has 200' frontage on Twin Oak Drive and is 300' in depth. The indicated value of this land is about \$10 per front foot or about \$1,450 per acre.

Sale #7 - Wagner to Flammia
1961 \$2,500

This is the same lot as described in above Sale #6. The grantor drilled a well on the property before the sale.

Sale #8 - Driscoll to Mathews
1959 Lot \$1,200

This sale consisted of a vacant lot, 100' front by 200' deep, located on Hickory Hill Drive in a new development which is situated off Walnut Hill Road, Thomaston. It is about 300' southerly of the Litchfield Town line. Since the date of the sale, the lot has been improved with a new one-story frame residence. Based on the sale's price, the indicated value of this land is about \$2,500 per acre or \$12 per front foot.

Sale #9 - Famiglietti to Carrington
28 April 1959 Lot \$1,000

This sale consists of a vacant lot on Hickory Hill Drive, Thomaston, located in the same development as discussed in the previous Sale #8. No public water or sewerage disposal is available. The indicated value of the land, based on the sale's price, is about \$2,175 per acre or \$10 per front foot.

Sale #10 - Goodwin to Stevens
 1957 4.5 Acres \$2,800

This is a sale of vacant land located on the westerly side of the Litchfield-Northfield Road about one-half mile northerly of the Thomaston-Litchfield Town line. It is located about 1,000' easterly of Northfield center. At the time of sale, access to the land was over a narrow right-of-way leading southerly from the Litchfield-Northfield Road. Subsequently the road has been relocated and now the parcel has frontage directly on the highway. About 2 acres of this parcel at the front was woodland. The remaining interior 2.5 acres of land consisted of good tillable field. The indicated value of this land based on the sale price is as follows:

2.0 Acres	Wooded Land @	\$400 =	\$ 800
2.5 "	Field Land @	800 =	2,000
<u>4.5 Acres</u>			<u>\$2,800</u>

Sale Price: \$2,800

This land has increased in value since the date of sale due to the road relocation. The current fair market value is estimated at \$4,000.

Sale #11 - Goodwin to Beacon Grange #118, Inc.
 Northfield, Connecticut
 November 1960 Approx. 1 Acre Lot \$1,200

This sale of land abuts the property discussed in Sale #10 above. The land was sold, however, after the relocated highway was under construction. The land has a gradual rise in grade from the Litchfield-Northfield Road. About 80% of the lot was cleared; the remainder was wooded. The indicated value of this land is about \$1,200 per acre based on the sale price. A new Grange hall is now under construction on this land.

Sale #12 - Miller to Kloss
 1959 5.7 Acres \$1,500

This sale of wooded land is located on Fenn Road, Thomaston, approximately 1.25 air miles easterly of the proposed dam and reservoir site. The land consists of a wooded hill with about 300' of frontage on Fenn Road. The grantee, a local real estate broker, purchased the property for future development.

Following is a breakdown of the estimated values of this sale based on the sale's price:

2.0 Acres	Frontage	@	\$400	=	\$ 800
3.7 "	Rear	@	200	=	740
<u>5.7 Acres</u>					<u>\$1,540</u>

Sale Price: \$1,500

Sale #13 - Lawson to Thorn
1960 95-acre Farm \$35,000

This sale consists of a 95+ acre dairy farm located on Walnut Hill Road, Thomaston, Connecticut, approximately two miles westerly of the project area.

The property consists of about 95 acres of farm land improved with a modest 1½-story frame farmhouse, a hay barn with a cow barn addition, and several other farm outbuildings. There are approximately 45 acres of cleared fields and good pasture and the balance is wooded and/or brush pasture. The one-story cattle barn has 20 stanchions with additional tie-ups and pens for young stock. The buildings are generally in poor condition with the exception of the cow barn.

The following is a breakdown of the estimated land and building values of this property based on the sale's price:

2.0 Acres	Homestead	@	\$2,000	=	\$4,000
24.3 "	Tillage	@	375	=	9,112
20.7 "	Pasture	@	225	=	4,657
<u>48.0 "</u>	Woodland	@	110	=	<u>5,280</u>
95.0+ Acres					\$23,049

Called: \$23,000

Buildings

House	\$ 6,500
Barn & Addition	4,000
Outbuildings	<u>1,500</u>

12,000

Total: \$35,000

Sale Price: \$35,000

Sale #14 - Gill to DeBisschopp, et al
1957 21 Acres \$10,000

This sale of vacant land is located on the northerly side of Walnut Hill Road approximately one mile westerly of the proposed

dam site. About 5 acres of this parcel was cleared field land and the balance was wooded. This land has since been subdivided into lots of 100' x 200', which are for sale at \$2,500 each. There is no public water or sewer system for this area. A road has been constructed into the parcel from Walnut Hill Road.

In December 1959, the owners transferred title to a corporation under name of Ridgewood of Thomaston, Inc.

Based on the sale's price, the indicated value of this land is as follows:

1.5 Acres	Road Frontage	@ \$1,000	= \$1,500
5.0 "	Clear Land	@ 550	= 2,750
<u>14.5</u> "	Interior Wooded Land	@ 400	= <u>5,800</u>
21.0+ Acres			\$10,050

Sale Price: \$10,000

Sale #15 - Haney to Burke
1960 40 Acres \$12,500

This sale is located on Prospect Street, Thomaston, about one mile southerly of Routes #6 and #202 and one-quarter mile westerly of Carter Road near the Plymouth town line. The land consists mainly of wooded land with the exception of approximately 6 acres of cleared field land. The rear portion of the tract is crossed by the Connecticut Power Co., power line right-of-way.

Improvements consisted of several poultry buildings, which are in the process of being removed. The parcel was purchased with the intention of developing a mobile home trailer park but the Thomaston Planning Board has refused to issue a permit for this purpose. Following is a breakdown of the estimated values of this sale:

5 Acres	Road Frontage	@ \$850	= \$ 4,250
6 "	Cleared Field	@ 400	= 2,400
29 "	Wooded Land	@ 200	= 5,800
<u>40 Acres</u>		Total:	<u>\$12,450</u>

Sale Price: \$12,500

Sale #16 - Chapman to Innes Realty, Inc.
1957 28 Acres \$30,000

This sale of valley land for gravel bank purposes is located on the southerly side of Morris Road (Route #109) in Thomaston, Connecticut.

The following is a breakdown of the estimated values of this sale:

28 Acres Sand and Gravel Land @ \$1,071 = \$29,988

Sale Price: \$30,000

This land compares favorably with the sand and gravel land within the project area. By comparison, the average indicated value of the sand and gravel land in the purchase area is approximately \$1,000 per acre.

Sale #17 - DeBisschopp, et al to Schatzki
21 July 1960 6.5 Acres \$3,500

This sale consists of 6.5 acres of vacant land located on the southerly side of Hickory Hill Road, approximately one mile westerly of the proposed dam. About 4 acres of this tract is cleared field land, and the balance of 2.5 acres at the rear boundary is wooded.

The grantee, whose dwelling is located across the street, purchased the land for protective area surrounding his residence. The land is considered suitable for residential development. Available utilities consist of electric and telephone systems along Hickory Hill Road. No public water or sewer systems are in this area.

Based on the sale's price, the indicated value of this land is as follows:

2.0 Acres	Cleared Frontage	@	\$1,000	=	\$2,000
2.0 "	Cleared Interior	@	500	=	1,000
<u>2.5</u> "	Rear, Wooded	@	200	=	<u>500</u>
6.5 Acres					\$3,500

Sale Price: \$3,500

Sale #18 - Cummings to Martone
March 1961 1.0-Acre Lot \$4,000

This vacant lot is located on the northerly side of Hickory Hill Road near the junction of Old Northfield Road in Thomaston, Connecticut, about one mile westerly of the proposed dam. Utilities serving the site are electric and telephone systems. Water supply and sewerage disposal are privately secured.

The lot is situated in a neighborhood of above-average homes and is considered indicative of the better lots in the area. A new residence is presently being constructed on this land.

Sale #19 - Hellerich to Hartford Electric Light Co.
8 August 1960 6.66 Acres of Woodland \$1,500

This sale of interior woodland is located on the easterly side of Litchfield Road, Thomaston, Connecticut, near the proposed dam site. The parcel is a narrow strip of rough wooded land, which was purchased for an electric-power-line right of way. The indicated value of this land, based on the purchase price, is about \$225 per acre.

6.66 Acres Woodland @ \$225 = \$1,498

Sale Price: \$1,500

19. CORRELATION AND UNIT VALUES ASSIGNED

From a study and analysis of the sales listed and from a knowledge of other transfers in the area, not shown in this report, the market value of the lands required for the Northfield Brook Dam and Reservoir has been estimated. Based on actual field observation, the lands have been classified as improved residential lots, residential developable, gravel, agricultural, woodland and waste land. A brief discussion of each classification follows as well as the average unit values assigned.

a. Improved Lots

Individual lots in the area generally range in area from about 1/2 acre to 2 acres. The valuation of each lot is based on the raw land value with added allowances for site improvements including wells, septic tanks, lawns, driveways, trees and shrubs. Based on an estimate of 1 acre per improved lot, the average value of \$3,000 per acre is considered reasonable.

b. Residential Developable Land

The areas in this category include generally the road frontages which are suitable for development and portions of interior lands. Also in this group are some lands which were formerly used as pasture, tillable fields, and some wooded areas. The value for this land ranges from approximately \$500 to \$4,000 per acre depending upon location, terrain, size of parcel and other factors. The better developable land, consisting of sizeable level open areas with adequate road frontage, has an indicated value of \$2,000 per acre.

c. Gravel

Several construction projects in the area have accelerated the demand for accessible deposits of bank run gravel. Only one area of the project is estimated to contain material of value, and access

is relatively poor. An average value of \$1,000 per acre is considered reasonable.

d. Agricultural

This use is actually an interim use since most of the land used for agricultural purposes would probably be developed eventually. In this category are areas of wooded pasture and hilly slopes not considered imminently developable but deriving current value both from the present use and future potential. Valuation is predicated on the sale price of interior land portions of listed sales, and the average value of \$300 per acre is considered reasonable.

e. Woodland

Woodland values were found to range from approximately \$50 per acre upwards to \$200 per acre depending upon terrain, access, location and size of parcel. The wood cover in the project area generally consists of second growth mixed hardwoods. Some areas have good stands of hemlock. There is no indication of any sales for timber or of woodland strictly for wood products in the area. The value of tree growth on wooded acreages is therefore included in the value of the land. The estimated average unit value for woodland in the purchase area is estimated at \$50 per acre.

f. Waste Land

The estimated area in this category includes ownerships in roads, brooks and streams, low wet areas, ledge and very steep slopes which have only limited use in relationship to other lands and which contribute only minimum value to an ownership. No value is estimated for these areas.

20. GROSS APPRAISAL

a. Land

<u>Classification</u>	<u>Area</u>	<u>Unit Value</u>	<u>Total Value</u>
Improved Lots	8 Acres	\$3,000	\$24,000
Developable	15 "	2,000	30,000
Gravel	25 "	1,000	25,000
Agricultural	50 "	300	15,000
Woodland	130 "	50	6,500
Waste, Roads & Water	22 "	-0-	-0-
	<u>250 Acres</u>		<u>\$100,500</u>

Total Land Value (See Page 18): \$100,500

b. Improvements

1 Set Farm Bldgs. & Residence)
1 Rod and Gun Club)
1 Miscellaneous)

Estimated Total: 60,000

Total Land and Improvements: \$160,500

21. CONTINGENCIES

A contingency allowance of 10% is considered reasonable to provide for possible appreciation of property values from the time of this estimate to the acquisition date, for additional areas and hidden ownerships disclosed by refinements of taking lines, for possible deficiency awards in condemnation, and to cover negotiations pursuant to EM 405-1-620.

22. ACQUISITION COSTS

Unit costs shown are based upon data obtained from current contracts in similar areas plus cost data experience for staff components. Based upon approximately 50 tracts of land to be acquired, the administrative costs of the lands acquisition program for Northfield Brook Reservoir are estimated as follows:

<u>Item</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Mapping and Survey	\$200	\$10,000
Appraisal	150	7,500
Title Evidence	125	6,250
Negotiations:		
Closing and Condemnation	<u>250</u>	<u>12,500</u>
Totals	\$725	\$36,250
Administrative Overhead: 10.2%		<u>+ 3,698</u>
		\$39,948
Rounded to:		\$40,000

23. RESETTLEMENT COSTS

Two units will be eligible for resettlement allowances. The estimated resettlement costs are as follows:

<u>Unit</u>	<u>Item</u>			
1	Former Farm Unit	@	\$1,000	= \$1,000
1	Club House	@	1,000	= 1,000
				<u>\$2,000</u>

24. COST SUMMARY

50 Tracts (30 Owners) - 250 Acres

a.	Fee Title - 250 Acres of Land	\$100,500
b.	Improvements	60,000
c.	Minerals and Crop Damage	-0-
d.	Water Rights	-0-
e.	Severance Damages	<u>4,000</u>
	Subtotal: Real Estate Interests:	\$164,500
f.	Contingencies (10% of above)	16,450
g.	Resettlement Costs	2,000
h.	Acquisition Costs (Est. 50 Tracts @ \$800)	<u>40,000</u>
	Total Real Estate Costs:	\$222,950
	Rounded to:	\$223,000

25. LAND ACQUISITION SCHEDULE

Northfield Brook Dam and Reservoir is currently scheduled for construction starting in Fiscal Year 1964. Relocation of State Road #854, including right-of-way acquisition, will probably be initiated in the second quarter. Additional land requirements are scheduled for acquisition during the third and fourth quarters of FY 1964.

This project is one for which an accelerated schedule has been requested. In the event that funds are provided and authority available for FY 1963, acquisition will commence in the second quarter and be completed in the third and fourth quarters of FY 1963.

26. PERSONNEL AND FACILITIES

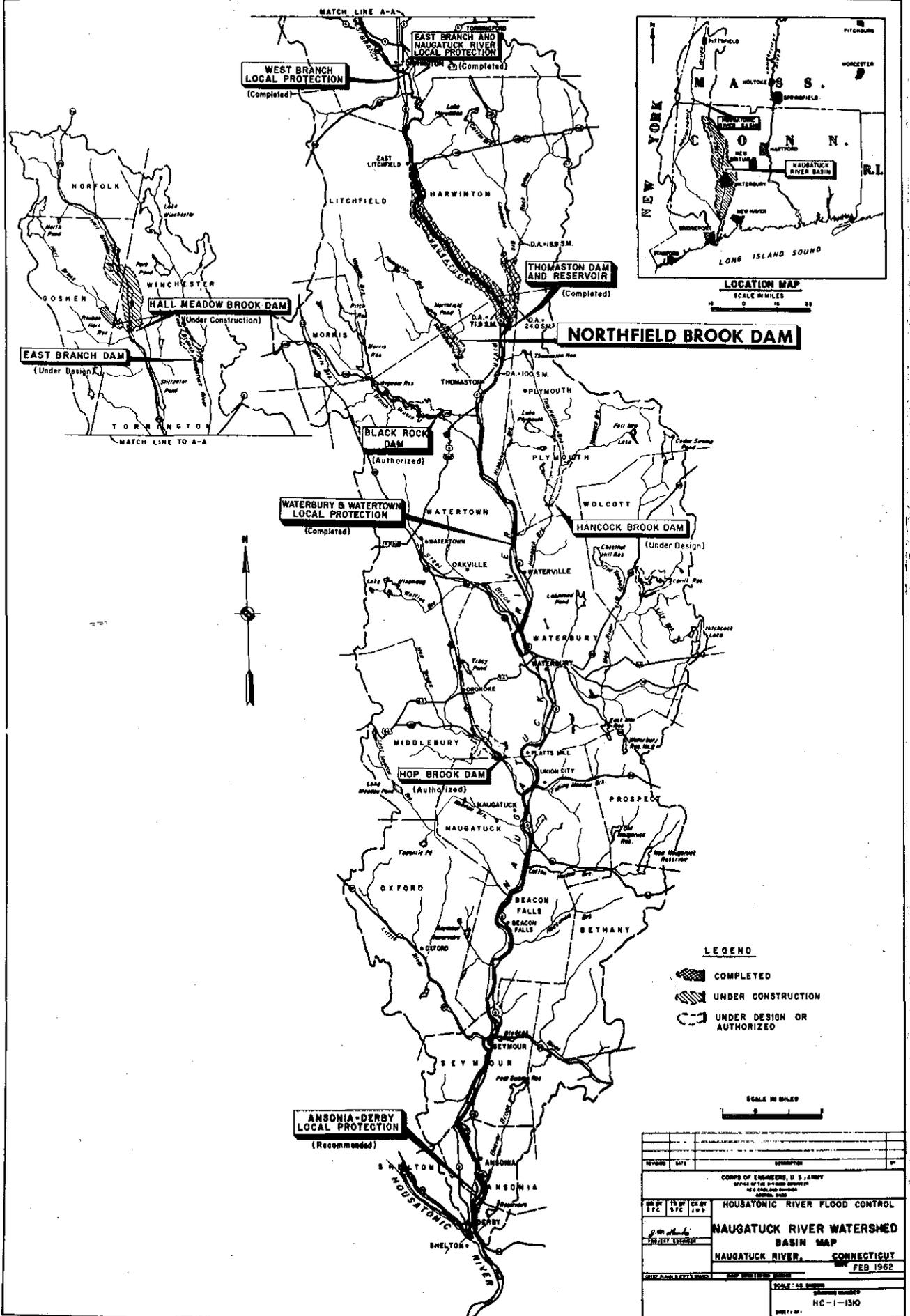
The real estate acquisition program outlined herein will be conducted and administered from the Division Office in Waltham, Massachusetts.

It is contemplated that mapping, survey, legal descriptions, title evidence, and appraisal will be obtained by contract. Negotiation, closings, and appraisal review will be accomplished by staff personnel.

27. CONCLUSION AND RECOMMENDATIONS

Estimated areas for acquisition in fee, as set forth in this report, are considered tentative in view of the lack of detailed tract data. The final determination of actual property taking lines within the scope of the current lands acquisition policy will be dependent upon detailed field investigations and thorough study of each tract.

It is recommended that the acquisition of the lands as outlined herein be approved contingent upon adherence to existing regulations and available funds and that the Division Engineer be authorized to acquire said lands subject to possible changes and variations as determined necessary prior to acquisition.



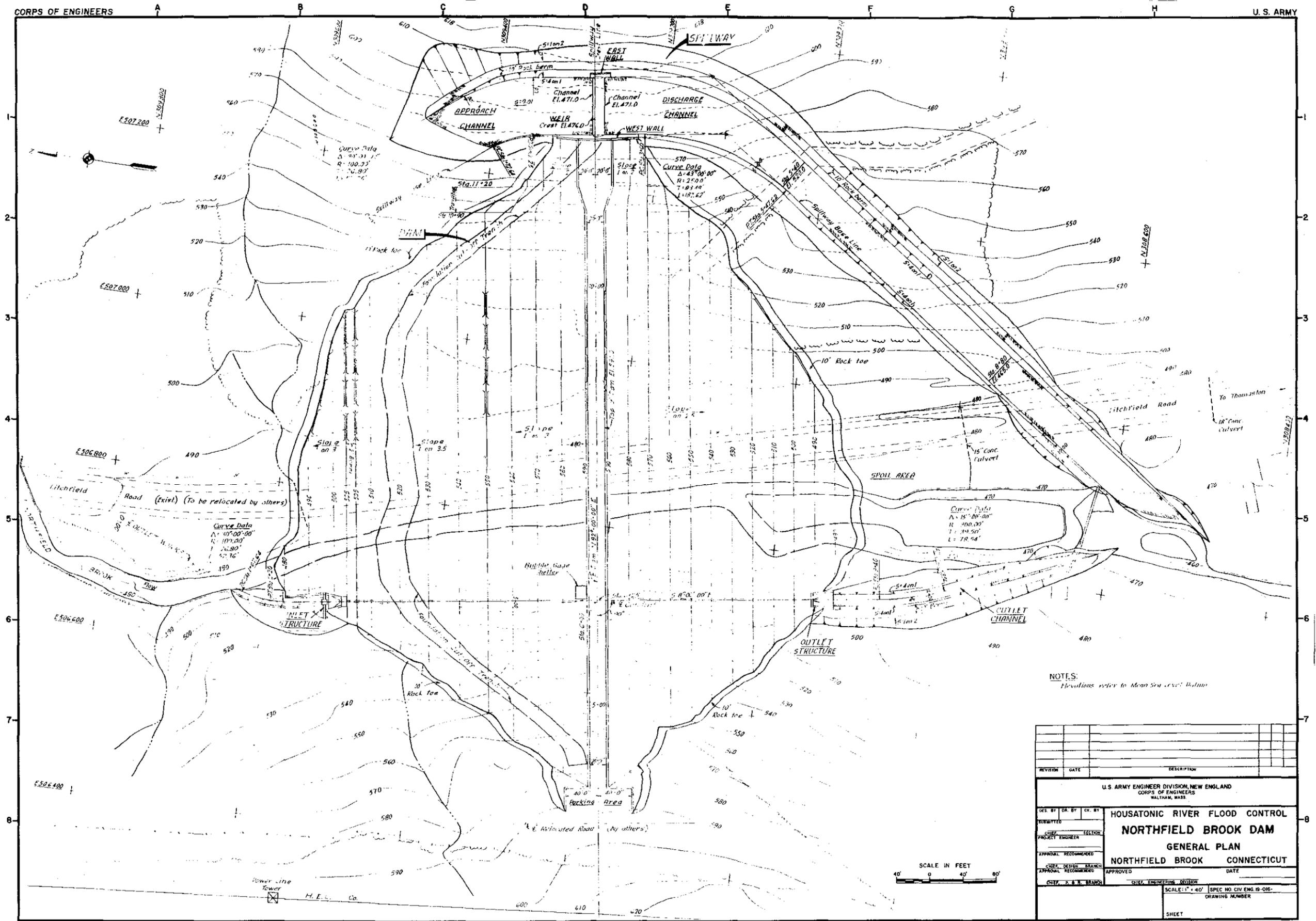
LOCATION MAP
SCALE IN MILES

LEGEND

- COMPLETED
- UNDER CONSTRUCTION
- UNDER DESIGN OR AUTHORIZED

SCALE IN MILES

REVISED	DATE	BY	DESCRIPTION
CORPS OF ENGINEERS, U. S. ARMY OFFICE OF THE DISTRICT ENGINEER NEW HAVEN DISTRICT JAN 1962			
BY	DATE	BY	DATE
BY	DATE	BY	DATE
HOUSATONIC RIVER FLOOD CONTROL NAUGATUCK RIVER WATERSHED BASIN MAP NAUGATUCK RIVER, CONNECTICUT FEB 1962			
SCALE: AS SHOWN		DRAWING NUMBER	
		HC-1-1310	



NOTES:
Elevations refer to Mean Sea Level Datum

REVISION	DATE	DESCRIPTION

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY: CR. BY: CK. BY: **HOUSATONIC RIVER FLOOD CONTROL**

PROJECT ENGINEER: **NORTHFIELD BROOK DAM**

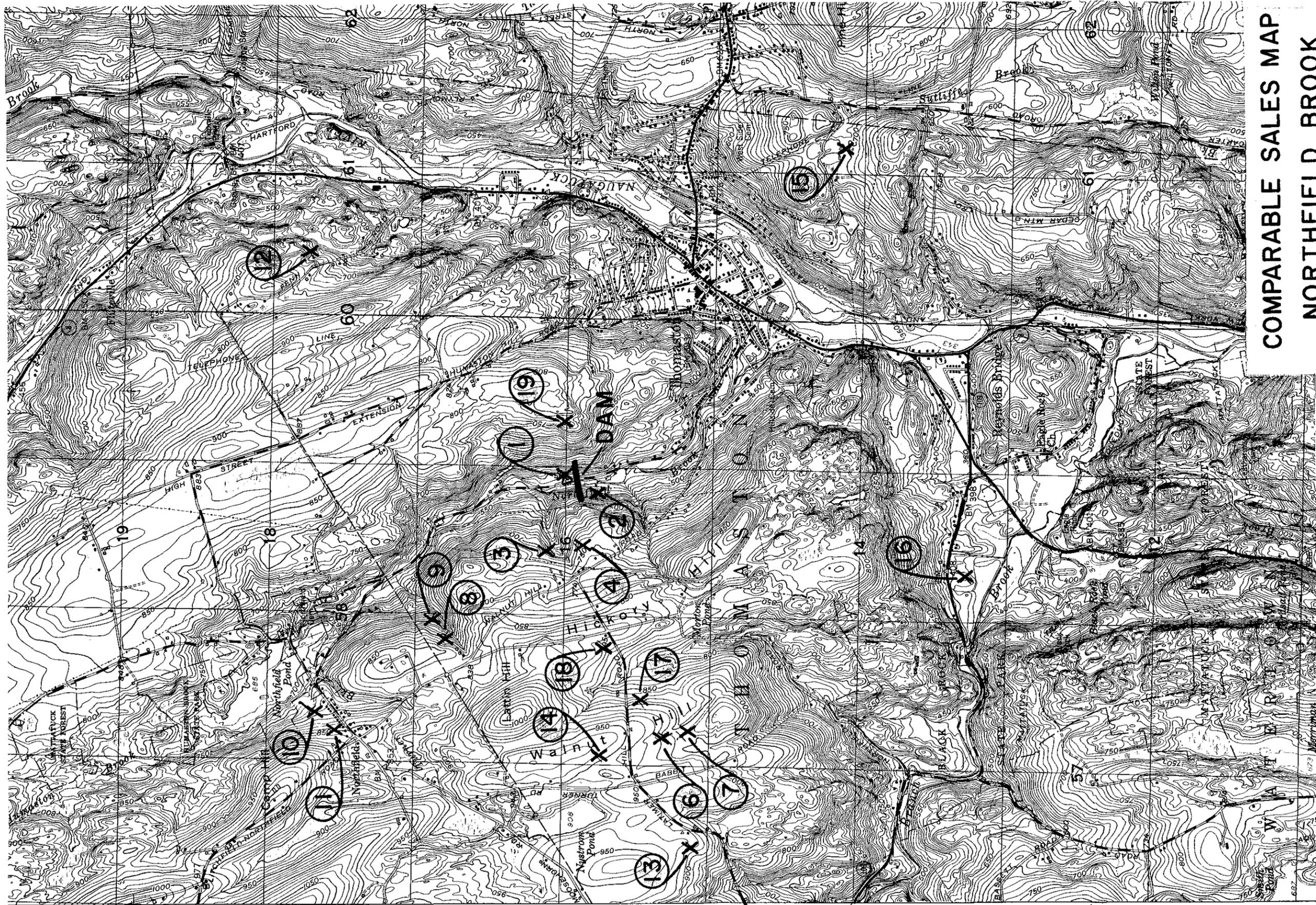
APPROVAL RECOMMENDED: **GENERAL PLAN**

APPROVAL RECOMMENDED: **NORTHFIELD BROOK CONNECTICUT**

APPROVED: _____ DATE: _____

SCALE: 1" = 40' SPEC. NO. CIV. ENG. 19-016- DRAWING NUMBER SHEET

SCALE IN FEET
0 40 80



**COMPARABLE SALES MAP
NORTHFIELD BROOK
DAM & RESERVOIR**

Scale 1:25,000

PLATE NO. 4

LEGEND:

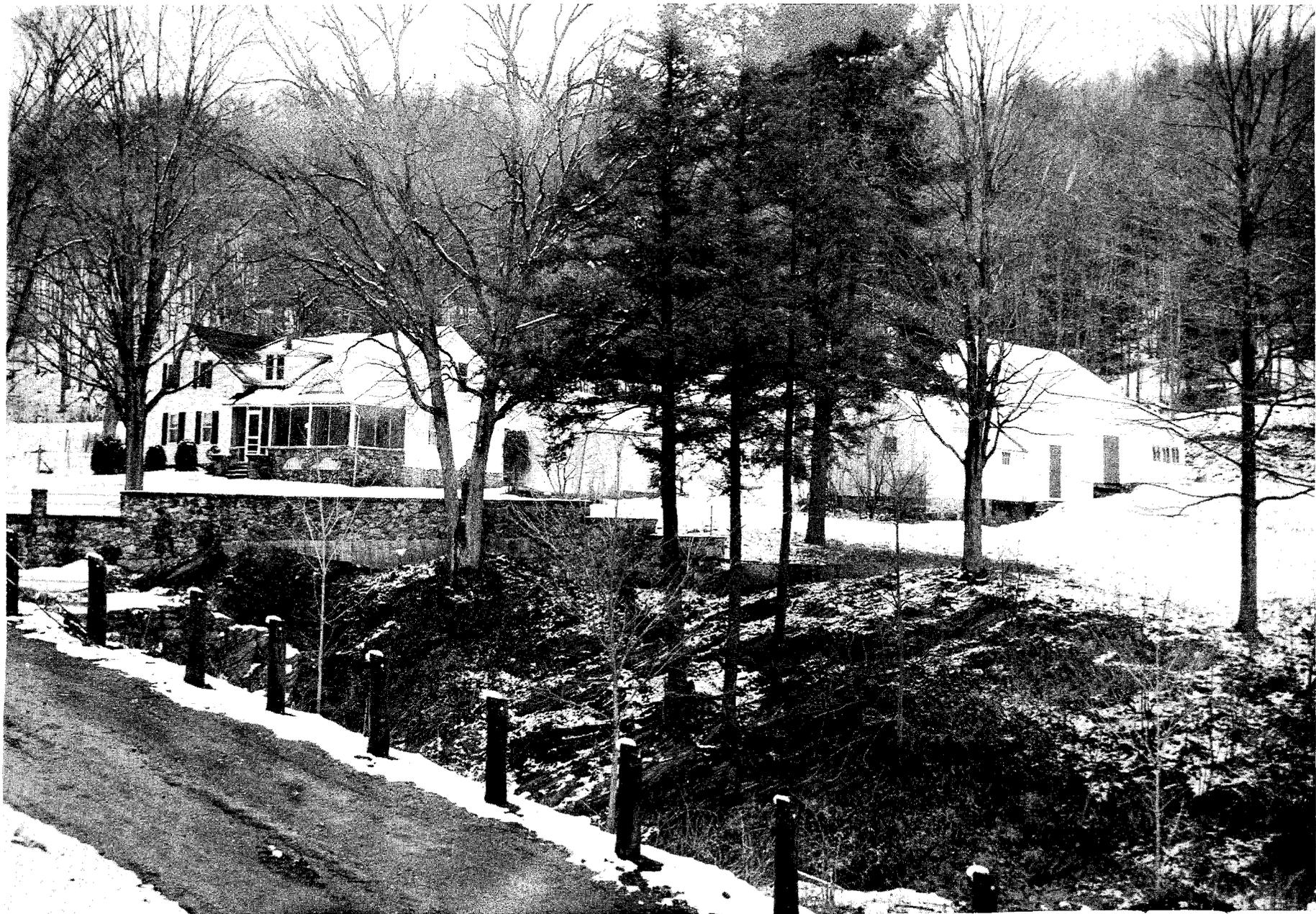
① COMPARABLE SALES.

TO ACCOMPANY REAL ESTATE MEMORANDUM NO.6, dated AUGUST 1962

461000m. N.



#1. LOOKING DOWNSTREAM TOWARD DAM SITE ALONG LITCHFIELD ROAD.



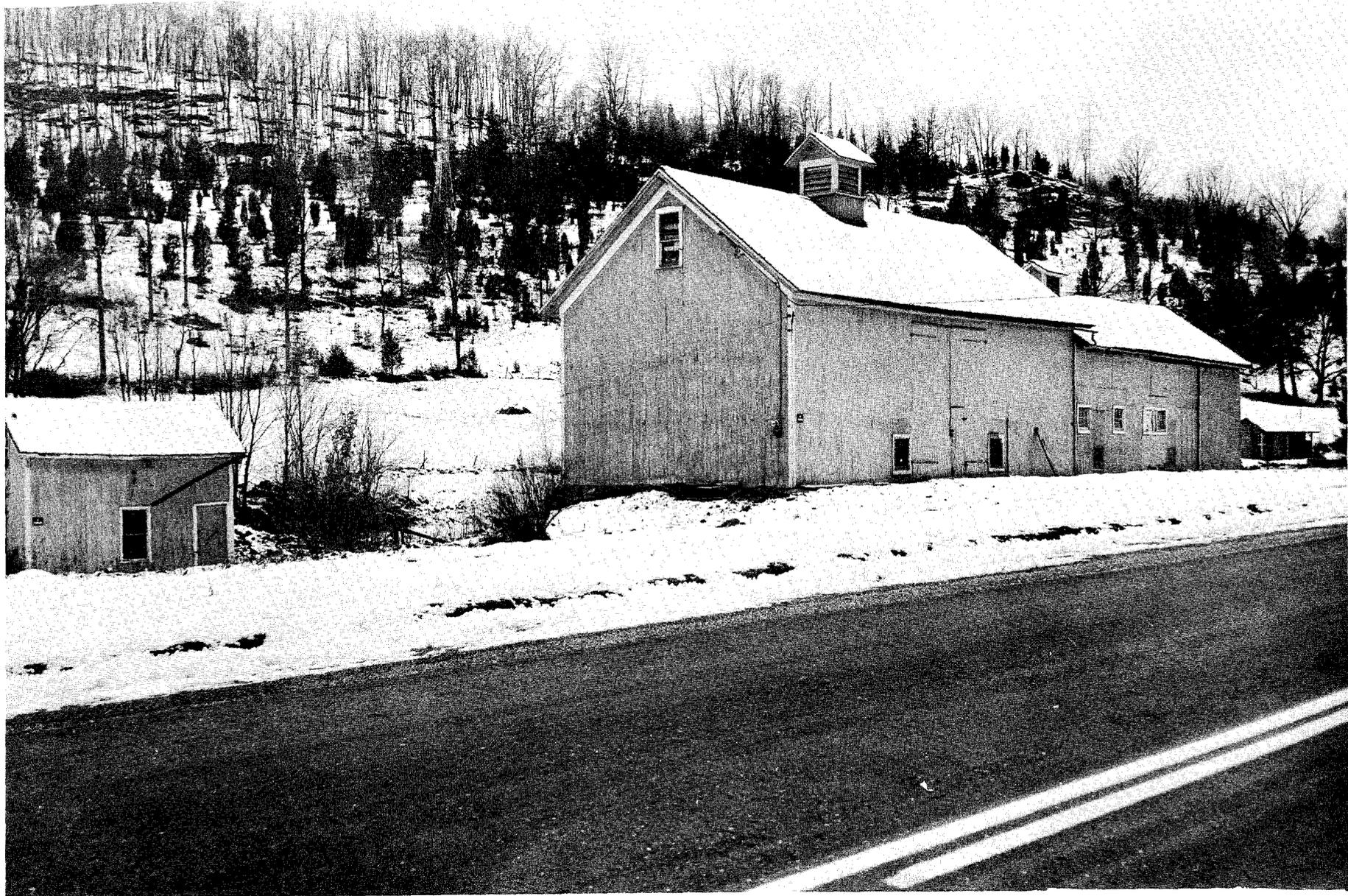
#2. SWANSON PROPERTY (HOUSE AND OUTBUILDINGS),
TO BE ACQUIRED ON LITCHFIELD ROAD.



#3. SWANSON PROPERTY (POULTRY BUILDINGS),
WEST SIDE OF LITCHFIELD ROAD.

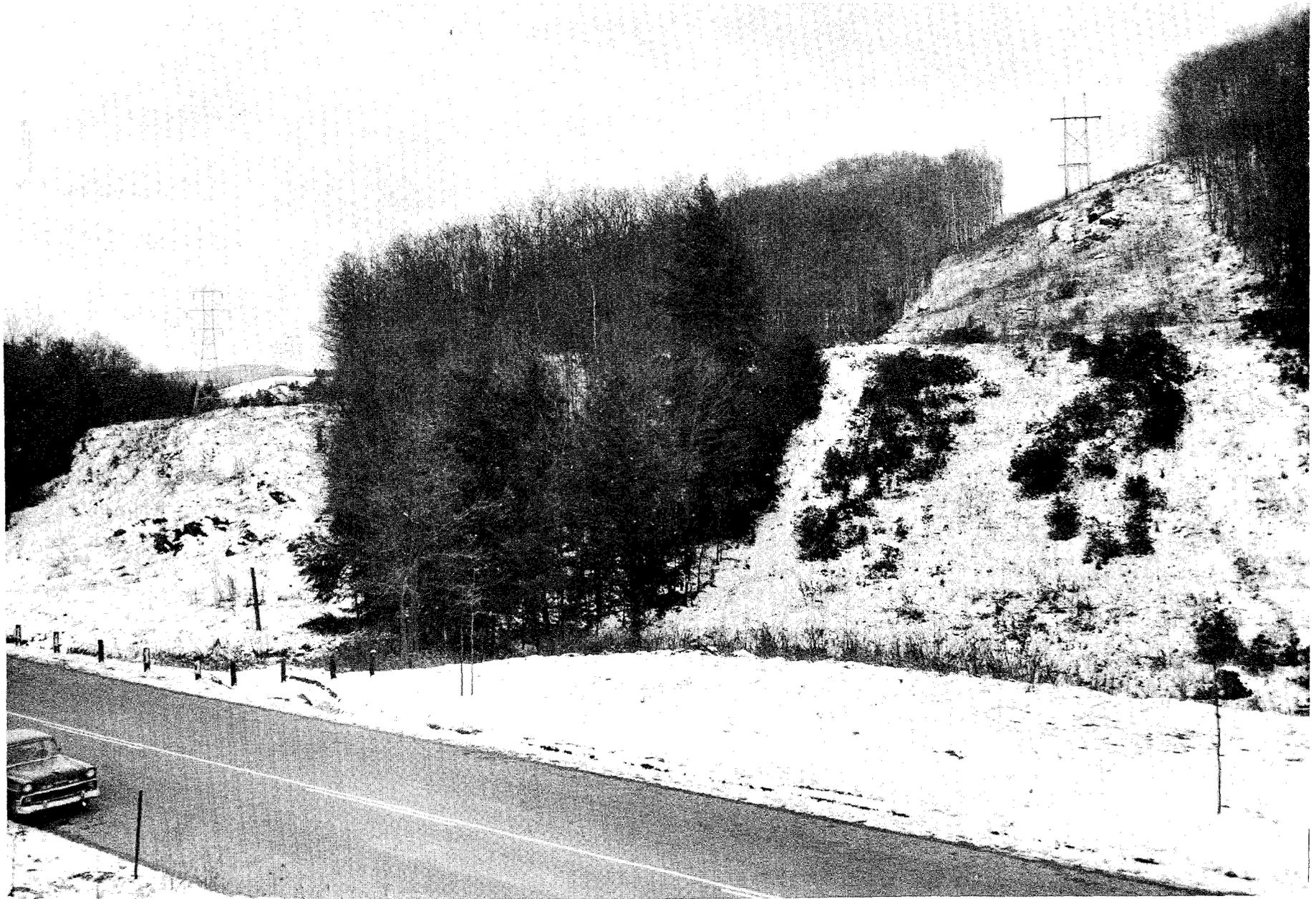


#4. VIEW OF THOMASTON ROD & GUN CLUB.

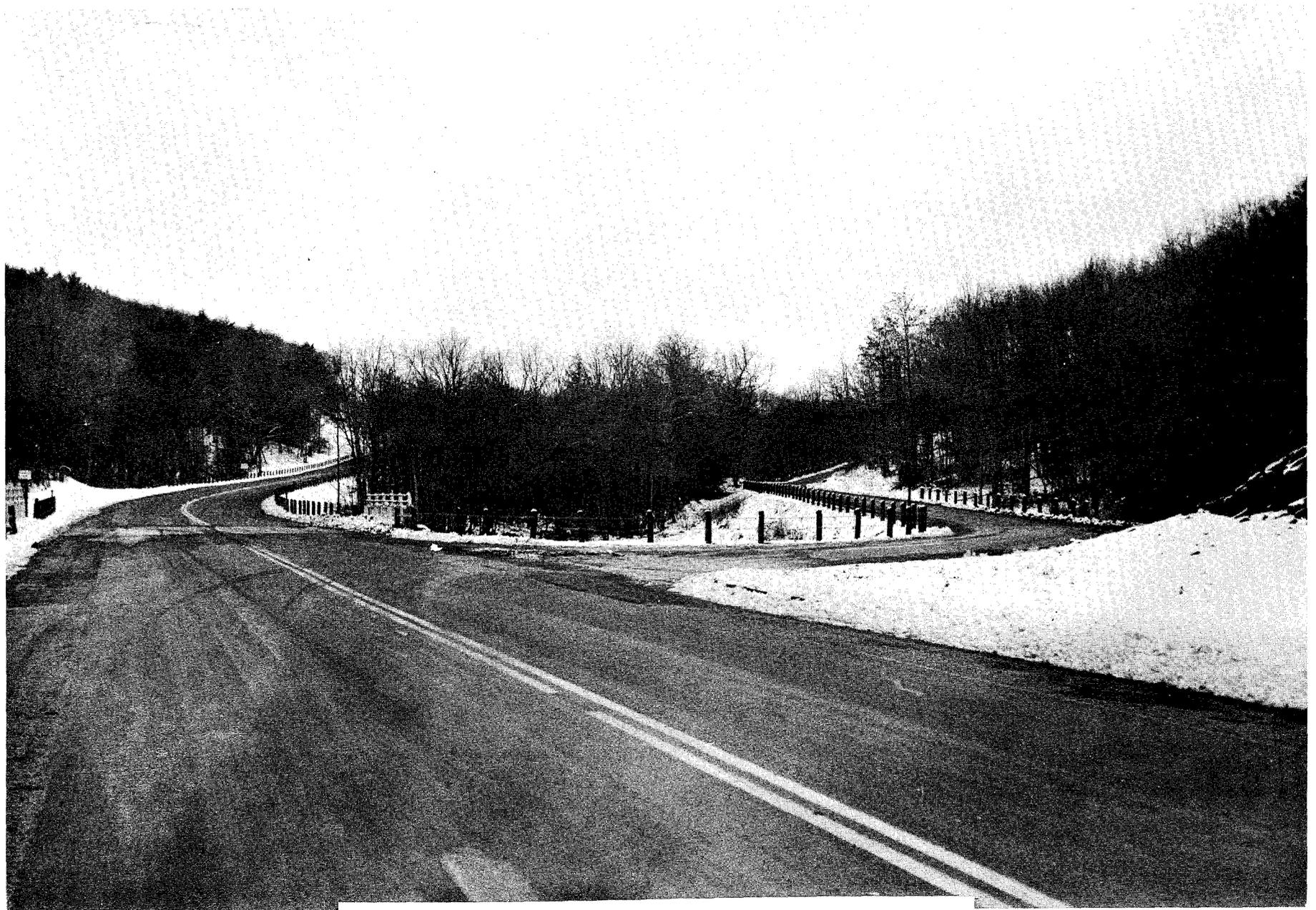




46 BREACHED DAM ON SCHERRA PROPERTY TO BE ACQUIRED FOR



#7. POWER LINES CROSSING OVER LITCHFIELD ROAD IN RESERVOIR AREA.



#8. JUNCTION OF LITCHFIELD AND KNIFE SHARPE ROADS